Applicant: David C. Collins Serial No.: 10/820,952 Filed: April 8, 2004 Docket No.: 200400670-1

Title: GENERATING AND DISPLAYING SPATIALLY OFFSET SUB-FRAMES

#### **REMARKS**

The following remarks are made in response to the Office Action mailed Jan. 29, 2009. Claims 1-7 and 9-30 were rejected. Claims 2, 4, 6, 11, 14, 16, 18, 21, 22, and 26-30 have been objected to. With this Response, claims 1, 3-5, 7, 9-12, 20, 22, 25, and 27 have been amended. Claims 6, 21, and 26 have been canceled without prejudice as to the subject matter contained therein. Claims 1-5, 7, 9-20, 22-25, and 27-30 remain pending in the application and are presented for reconsideration and allowance.

## **Requirement for Information**

On information and belief of the inventor and the undersigned, the invention was not published, publicly announced, or publicly disclosed prior to filing.

## Allowable Subject Matter

The Office Action objected to claims 2, 4, 6, 11, 14, 16, 18, 21, 22, and 26-30 for being dependent upon a rejected base claim and indicated that the claims would be allowable if rewritten in independent form including all limitations of the base claim and any intervening claims and if rewritten to overcome the 35 U.S.C. §112 rejections.

As described below, Applicant has amended claim 1 to include the features of claim 6 and overcome the rejections under 35 U.S.C. §101, amended claim 12 to include features similar to those of claim 6, amended claim 20 to include the features of claim 21, and amended claim 25 to include the features of claim 26. Accordingly, Applicant respectfully requests allowance of claims 1-5, 7, 9-20, 22-25, and 27-30 for at least these reasons.

# Claim Rejections under 35 U.S.C. § 101

Claims 1-5, 7, and 9-11 are rejected under 35 U.S.C. §101 as not falling within one of the four statutory categories of invention.

Claims 12-19 are rejected under 35 U.S.C. §101 because the claimed invention is directed to non-statutory subject matter.

Claims 1-5, 7, and 9-11 have been amended to recite "image processing unit" and "the display device." Applicant respectfully submits that the statement in the Office Action that "the generating and alternating steps could be performed without use of a machine or

Applicant: David C. Collins Serial No.: 10/820,952 Filed: April 8, 2004 Docket No.: 200400670-1

Title: GENERATING AND DISPLAYING SPATIALLY OFFSET SUB-FRAMES

device", Office Action, p. 6, is now moot based on the amendments to claims 1-5, 7, and 9-11. Accordingly, Applicant respectfully requests the withdrawal of the rejection of claims 1-5, 7, and 9-11 under 35 U.S.C. §101.

Claim 12 recites, *inter alia*, "a buffer", "an image processing unit", and "a display device". Applicant respectfully submits that each of these features of claim 12 comprises definite structure indicative of a physical apparatus. Applicant also respectfully submits that the statement in the Office Action that "the invention may be embodied as pure software see paragraph 44", Office Action, p. 6, is erroneous. Applicant's Specification does not teach or suggest that either "a buffer" or "a display device" as recited in claim 12 may be embodied as "pure software." Accordingly, Applicant respectfully requests the withdrawal of the rejection of claims 12-19 under 35 U.S.C. §101.

## Claim Rejections under 35 U.S.C. § 103

Claims 1, 3, 5, 7, 9, 10, 12, 13, 15, 17, 19, 20, ands 23-25 are rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Application Publication No. 2004/0027363 (Allen) in view of "Super-Resolution Composition in Multi-Projector Displays" by Jaynes et al. (Jaynes).

Claims 1, 3, 5, 7, 9, 10, 12, 13, 15, 17, and 19 are rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. 6,340,994 (Margulis) in view of Jaynes.

Applicant has amended claim 1 to recite the features of objected to claim 6 and has canceled claim 6. Accordingly, Applicant respectfully requests the withdrawal of the rejections of claims 1, 3, 5, 7, 9, and 10 under 35 U.S.C. §103.

Applicant has amended claim 12 to recite "wherein each of the sub-frame pixel values in each of the plurality of rows is calculated using a number of pixel values from the image data and the previous one of the plurality of rows that corresponds to a number of iterations used to generate the first and second sub-frames." Applicant respectfully submits that these features of claim 12, like the features of objected to claim 6 (now canceled), are not taught or suggested by the cited references. Accordingly, Applicant respectfully requests the withdrawal of the rejections of claims 12, 13, 15, 17, and 19 under 35 U.S.C. §103.

Applicant: David C. Collins Serial No.: 10/820,952 Filed: April 8, 2004 Docket No.: 200400670-1

Title: GENERATING AND DISPLAYING SPATIALLY OFFSET SUB-FRAMES

Applicant has amended claim 20 to recite the features of objected to claim 21 and has canceled claim 21. Accordingly, Applicant respectfully requests the withdrawal of the rejections of claims 20, 23, and 24 under 35 U.S.C. §103.

Applicant has amended claim 25 to recite the features of objected to claim 26 and has canceled claim 26. Accordingly, Applicant respectfully requests the withdrawal of the rejections of claims 25 and 27-30 under 35 U.S.C. §103.

## **Double Patenting**

Claims 1-5, 7, 9-20, 22-25, and 27-30 are provisionally rejected on the ground of nonstatutory double patenting over:

- 1. Claims 1-29 of co-pending Application No. 10/821,130 in view of Super-Resolution Composition in Multi-Projector Displays" by Jaynes et al. (Jaynes);
- 2. Claims 1-29 of co-pending Application No. 10/864,125 in view of Jaynes;
- 3. Claims 1-25 of co-pending Application No. 10/868,638 in view of Jaynes;
- 4. Claims 1-29 of co-pending Application No. 10/868,719 in view of Jaynes;
- 5. Claims 1-27 of co-pending Application No. 10/992,926 in view of Jaynes;
- 6. Claims 1-32 of co-pending Application No. 10/750,591 in view of Jaynes;
- 7. Claims ???¹ of co-pending Application No. 10/697,605 in view of Jaynes;
- 8. Claims 1-42 of co-pending Application No. 10/696,888 in view of Jaynes;
- 9. Claims 1-33 of co-pending Application No. 10/821,135 in view of Jaynes;
- 10. Claims 1-24 of co-pending Application No. 10/632,042 in view of Jaynes;
- 11. Claims 1-20 of co-pending Application No. 10/672,544 in view of Jaynes;
- 12. Claims 1-30 of co-pending Application No. 10/768,621 in view of Jaynes;
- 13. Claims 1-32 of co-pending Application No. 10/768,215 in view of Jaynes;

<sup>1</sup> The Office Action does not indicate which claims of co-pending Application No. 10/697,605, other than claim 1, form the basis of this rejection.

Applicant: David C. Collins Serial No.: 10/820,952 Filed: April 8, 2004 Docket No.: 200400670-1

Title: GENERATING AND DISPLAYING SPATIALLY OFFSET SUB-FRAMES

- 14. Claims 1-30 of co-pending Application No. 10/947,762 in view of Jaynes; and
- 15. Claims 1-26 of co-pending Application No. 10/996,083 in view of Jaynes.

Claims 1-30 are rejected on the ground of nonstatutory double patenting over:

- 1. Claims 1-33 of U.S. Patent No. 7,030,894 in view of Jaynes;
- 2. Claims 1-60 of U.S. Patent No. 7,034,811 in view of Jaynes; and
- 3. Claims 1-37 of U.S. Patent No. 7,109,981 in view of Jaynes.

Because neither the claims of the above applications or patents nor Jaynes teach or suggest all of the features of claims 1-5, 7, 9-20, 22-25, and 27-30 (see above and Office Action, pp. 43-44, "Allowable Subject Matter"), Applicant respectfully requests the withdrawal of the non-statutory double patenting rejections of claims 1-5, 7, 9-20, 22-25, and 27-30.

Applicant: David C. Collins Serial No.: 10/820,952 Filed: April 8, 2004 Docket No.: 200400670-1

Title: GENERATING AND DISPLAYING SPATIALLY OFFSET SUB-FRAMES

## **CONCLUSION**

In view of the above, Applicant respectfully submits that pending claims 1-5, 7, 9-20, 22-25, and 27-30 are in form for allowance and are not taught or suggested by the cited references. Therefore, reconsideration and withdrawal of the rejections and allowance of claims 1-5, 7, 9-20, 22-25, and 27-30 is respectfully requested.

No fees are required under 37 C.F.R. 1.16(h)(i). However, if such fees are required, the Patent Office is hereby authorized to charge Deposit Account No. 08-2025.

The Examiner is invited to contact the Applicant's representative at the below-listed telephone numbers to facilitate prosecution of this application. Any inquiry regarding this Amendment and Response should be directed to either Roger Greer at Telephone No. (312) 987-4000, or Christopher P. Kosh at Telephone No. (512) 241-2403, Facsimile No. (512) 241-2409. In addition, all correspondence should continue to be directed to the following address:

IP Administration Legal Department, M/S 35 HEWLETT-PACKARD COMPANY P.O. Box 272400 Fort Collins, Colorado 80527-2400

Respectfully submitted,

David C. Collins

By,

DICKE, BILLIG & CZAJA, PLLC Fifth Street Towers, Suite 2250 100 South Fifth Street Minneapolis, MN 55402 Telephone: (612) 573-2000

Facsimile: (612) 573-2005

Date: April 27, 2009 /Christopher P. Kosh/

CPK:dmd Christopher P. Kosh Reg. No. 42,760